

Training – EMS Element 8.0				
EMS Procedure 8.0	Revision 08	Approval Signature:	Effective Date: Oct. 06, 2014	
Purpose:	The purpose of this procedure is to offer all the necessary awareness and knowledge involved in biosolids management activities in a formalized training program that includes all City and Contractor employees.			
Scope:	This procedure applies to all City and Contractor training performed either in-house or externally by qualified instructors and peers that covers all Critical Control Points.			
Definitions:	Knowledge – To recognize, be familiar with, or understand information, activities, and actions based on experience or association; acquaintance with a science, art, or technique.			
	 Skills – The ability to use knowledge effectively and readily in execution or performance of tasks and activities; a developed aptitude or ability; the ability to do something competently. Training – Teaching to make fit, qualified, or proficient; preparation for a test of skill or knowledge; instruction in disciplines and techniques. 			
Responsibility:	The following individuals are ultimately responsible for setting and implementing all the training needs for the Village Creek Wastewater Treatment Plant Facility: Assistant Director (Pollution Control), Water Systems Superintendent, Assistant Water Systems Superintendent (Operations), Assistant Water Systems Superintendent (Maintenance), Biosolids EMS Manager, Village Creek Training Specialists, and Biosolids Manager (Contractor). However, the entire EMS Team and all wastewater staff are encouraged to give their input to the continued improvement of the training program.			
Procedure:	The City of Fort Worth strives to hire the most qualified people for each position within the biosolids value chain. The educational and experience requirements are described in each job description as discussed in Element 7.0 and on the City's intranet. Once the new employees begin their jobs they are continually trained to perform their tasks as efficiently as possible, to keep up with the latest advances in the processes, to be aware of the requirements and tasks of other positions, to perform their job as safely as possible, and to be aware of the most recent regulatory requirements. For some employees, such as operators, the State of Texas and the City require certain levels of training. Employees receive training as on the job training, formal class room training, professional conferences, regular meetings with management and supervisors, and inhouse presentations. The City's Human Resources Department and the Wastewater Treatment Administrative Division both document and track each employee's training history.			



Training – EMS Element 8.0

State Mandated Training: Texas Administrative Code (TAC) Title 30 Part 1 Chapter 30 Occupational Licenses and Registrations requires that "persons that operate, assist in the operation, or contract to operate domestic wastewater treatment facilities, or supervise wastewater collection activities other than an operator-in-training, must be licensed or registered..." These requirements can be found at the TAC website,

http://info.sos.state.tx.us:80/pub/plsql/readtac\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=30. The operators must achieve the levels of training, pass the required examinations and complete the required continuing education to maintain their licenses. The Texas Commission on Environmental Quality governs this policy and documents and tracks each operator's performance. The City employs state certified instructors who teach many of the required classes at VCWRF.

On the Job Training: The Wastewater Treatment Administration and Technical Services Divisions and each supervisor provide the required training to insure each employee has the necessary knowledge and skills to perform his or her job safely and efficiently. This training includes conveying standard operation procedures and policies, location of necessary operational and safety equipment, EMS procedures, etc.

Classroom Training: The City employs certified instructors that regularly teach safety, process, and other courses at VCWRF. The Wastewater Treatment division provides extensive safety training to its employees and other City departments each month. In addition the City will bring in outside instructors to teach courses. Employees are also encouraged to attend regular and short courses at colleges and universities. These courses meet the required State and Federal requirements including those specified by the Occupational Safety and Health Administration.

Learning Services: The City's Learning Services division of the Human Resources Department helps develop employees, to strengthen dynamic leaders, and to facilitate the improvement of organizational effectiveness. More information about this division can be found on the City's website, http://fortworthtexas.gov/hr/learn.asp.

Professional Conferences: The City encourages its employees to attend workshops and conferences held by organizations, such as the American Water Works Association, the Water and Environment Federation, the Biosolids Partnership, and other treatment facilities.

Management Meetings: The Wastewater Treatment Administration holds regular meetings with employees to review employee performance and to discuss issues such as EMS implementation and requirements.

In-house Presentations: The City uses in-house presentations to convey new policy and procedures to its employees. The employees are also introduced to new programs, such as the EMS, at these presentations.

Issue Date: October 06, 2014 Element 8.0 / Page 2 of 4



Training - EMS Element 8.0

Maintenance/Operator Program (MOP): The Fort Worth Water Department also utilizes incentive programs to allow employees to gain additional training. The MOP is one such program. In 2003 the Fort Worth Water Department developed and implemented this Maintenance/Operator Bonus Program to achieve a Multi-Skilled Workforce, provide staff flexibility, and reduce overtime costs.

All new operations and maintenance employees and current employees who volunteer join the program for a minimum of one year. These employees must have a TCEQ Texas Wastewater Certificate and successfully complete the required training program. Once in the program, the operators must perform 60 hours of light maintenance work each quarter, and maintenance personnel must perform 60 hours of shift work each quarter that is normally filled with overtime. The City establishes MOP work goals for each quarter and pays cash bonus to the MOP participants each quarter if the goals are met. The Operations and Maintenance Divisions track and document all work completed under this program. Additional information concerning this program can be found at the Operations Office at VCWRF.

City Contractors: The City requires each of its contractors to "employ only such superintendents, foremen, and workmen who are careful, competent, and fully qualified to perform the duties or tasks assigned to them ..." through the General Conditions Section C7-7.5 of its standard contract documents. The contractor is responsible for providing the proper training for each of his or her employees working on the project. The Contractor shall submit a listing of employee training to the City annually.

This training includes that required by federal, state, and local regulations as well as any special training required by the project. The City allows the Contractor's employees to attend the certified wastewater training courses presented at VCWRF and keeps the contractor informed of upcoming workshops, short courses, etc. The contractor also provides its employees the necessary safety training, Department of Transportation training, and any other training required. The City and Contractor discuss and coordinate this training at regular project progress meetings.

EMS Training: The Biosolids EMS Manager is responsible for overseeing EMS training. The Biosolids EMS Manager and selected EMS team members attend NBP workshops, track EMS changes through the NBP website http://www.biosolids.org/ and personal contact, and self study to obtain the required information to train the Village Creek Water Reclamation Facility staff and biosolids contractors.

- New Employee Training: New or reassigned employees are introduced to the Biosolids EMS through plant orientation. An EMS orientation and training presentation will be presented to new employees.
- VCWWTP Safety Meetings: The Biosolids EMS Manager, EMS Coordinator, or designated Training Specialist will present EMS topics including policy, nonconformance issues, EMS principles, etc. in conjunction with the monthly safety meetings to the VCWRF staff. EMS training will be provided at least semi-annually or more frequently if necessary. Sign in sheets and a copy of the presented EMS training material will be filed in the EMS Employee Awareness Binder.

Issue Date: October 06, 2014 Element 8.0 / Page 3 of 4



Training – EMS Element 8.0

- Biosolids Newsletter: At least semi-annually, a biosolids newsletter will be provided to the VCWRF staff. News about the program and biosolids in general will be provided. EMS topics will be included as well; therefore, the newsletter can act as supplemental EMS training for plant employees.
- Plant Staff Meetings: The topic of Biosolids EMS is an agenda item on the regular Plant staff meetings. The Biosolids EMS Manager discusses EMS procedures and issues with Water Department Staff at regular meetings and obtains feedback and ideas.
- Project Progress Meetings: The topic of Biosolids EMS is an agenda item
 on the regular Project Progress Meetings between the City and Contractor.
 This forum allows for training, discussion and feedback on EMS procedures,
 EMS principles and issues with the City's contractors at the regular project
 progress meetings.

References: EMS Framework Guidance Manual: http://www.wef.org/Biosolids/

Code of Good Practice, (NBP): http://www.wef.org/Biosolids/

Manual of Good Practice for Biosolids, (NBP): http://www.wef.org/Biosolids/

Texas Administrative Code Title 30, Part 1, Chapter 30

Element 6.0 Public Participation Element 7.0 Roles and Responsibilities

Element 9.0 Communication and Public Outreach

Revision #	Date	Revision Description
08	10/06/2014	Updated links
07	02/17/2014	Updated EMS Training section, updated references.
06	08/05/2013	Updated references
05	11/16/2010	Update responsibilities and references
04	05/15/2008	Audit (YR2) 2007
03	06/27/2007	Audit (YR1) 2006
02	11/29/2004	2004 Issue
01	10/01/2004	Approval Draft
SR	01/30/2004	Issued for Status Review

Issue Date: October 06, 2014 Element 8.0 / Page 4 of 4